

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A method for providing a disk drive having a maximum current draw which is selectable by a user, comprising:

 receiving a maximum current draw first selection, selected by said user, without the need for the user to make a second selection in order to select said maximum current
5 draw; and

 limiting an actual current draw of said disk drive to said selected maximum.
2. (Original) The method of Claim 1, wherein said selected maximum current draw is about equal to an amount of current drawn by said disk drive during seek operations.
3. (Previously presented) The method of Claim 1, wherein said selected maximum current draw is about equal to a steady-state spin current of a spindle motor of said disk drive plus a current drawn by an actuator of said disk drive when said actuator is in operation.
4. (Previously presented) The method of Claim 2, wherein said current drawn during seek operations is equal to a steady-state spin current of a spindle motor of said

disk drive, plus a current drawn by an actuator when said actuator is in operation, plus an amount of current drawn by control electronics associated with said disk drive.

5. (Previously presented) The method of Claim 1, wherein said selected maximum current draw is equal to about four times an amount of current drawn by said disk drive during seek operations.

6. (Original) The method of Claim 1, wherein said selected maximum current draw is selected from a plurality of current amounts.

7. (Previously presented) The method of Claim 6, wherein said plurality of current amounts comprise a first amount equal to about a steady state spin current of said disk drive plus an amount of current drawn by an actuator of said disk drive during seek operations, and wherein a selection of said first amount results in a disk drive start-up time that is greater than a disk drive start-up time resulting from a selection of a second amount that is greater than said first amount.

8. (Original) The method of Claim 7, wherein a selection of said first amount allows a power supply having a first capacity, and wherein a selection of said second amount requires a power supply having a second capacity, wherein said second capacity is greater than said first.

9. (Original) The method of Claim 1, wherein said step of receiving a maximum current draw selection comprises setting a hardware switch.

10. (Original) The method of Claim 9, wherein said hardware switch comprises at least one of a jumper and a mechanical switch.

11. (Original) The method of Claim 1, wherein said step of receiving a maximum current draw selection comprises specifying a maximum current draw selection through at least one of a software command, a firmware command, and a microcode command.

12. (Previously presented) A method for reducing start-up current in a disk drive, comprising:

determining a maximum normal operating current for said disk drive; and

5 setting, by a user, a maximum start-up current first setting, without the need for the user to set a second setting in order to set said maximum start-up current, said maximum start-up current being set to an amount about equal to said maximum normal operating current, wherein a power supply for said disk drive is designed to supply said maximum normal operating current.

13. (Original) The method of Claim 12, wherein said maximum normal operating current comprises spindle motor current during steady-state operation of said spindle motor and an actuator current when an actuator assembly is moved from a first position to a second position.

14. (Original) The method of Claim 12, further comprising loading a transducer head of said disk drive into position over a storage disk of said disk drive after said storage disk has attained a predetermined rotational velocity.

15. (Original) The method of Claim 12, further comprising supplying an electrical current to said disk drive from a power supply, wherein said power supply is incapable of supplying said disk drive with more than said maximum normal operating current.

16. (Original) The method of Claim 12, wherein said normal operating current for said disk drive does not comprise an unregulated current draw of said disk drive during disk spin-up.

17. (Previously presented) The method of Claim 12, wherein said maximum normal operating current of said disk drive is less than 0.5 Amp.

18. (Previously presented) A disk drive apparatus, comprising:

a base;

a spindle motor;

at least a first storage disk having a plurality of data tracks interconnected to said

5 base by said spindle motor;

at least a first transducer head interconnected to said base for reading and writing information to said plurality of data tracks of said at least a first storage disk;

an actuator interconnected to said transducer head for moving said transducer head with respect to said storage disk to address a selected one of said data tracks; and

10 a maximum current draw selector, operable by a user to make a maximum current draw first selection, without the need for the user to make a second selection in order to select said maximum current draw, wherein a maximum current drawn by said disk drive does not exceed said maximum current draw selected by said user.

19. (Original) The disk drive apparatus of Claim 18, wherein an amount of current drawn by said spindle motor during steady-state operation plus an amount of current drawn by said actuator during a seek operation is about equal to a minimum selectable maximum current.

20. (Original) The disk drive apparatus of Claim 18, wherein said maximum current draw selector comprises a selector switch.

21. (Original) The disk drive apparatus of Claim 18, wherein said maximum current draw selector comprises at least one of software, firmware, or microcode.

22. (Original) The disk drive apparatus of Claim 18, further comprising a power supply interconnected to said disk drive, wherein said power supply is sized to provide said disk drive with an amount of current equal to said selected maximum current.

23. (Previously presented) A method for reducing the current supply requirements of a power supply interconnected to a disk drive, comprising:

providing a power supply;

providing a disk drive comprising:

5 at least a first storage disk;

 a spindle motor;

 an actuator; and

 at least a first transducer head;

10 selecting, by a user, a maximum disk drive supply current first selection, without
the need for the user to make a second selection in order to select said maximum disk
drive supply current;

 supplying from said power supply said maximum disk drive supply current to said
disk drive during start-up of said disk drive; and

 loading said transducer head onto said storage disk.

24. (Original) The method of Claim 23, wherein said power supply is sized to provide said maximum disk drive supply current to said disk drive plus an additional amount of current, wherein said additional amount of current is less than said maximum disk drive supply current.

25. (Original) The method of Claim 23, further comprising determining a maximum normal operating current draw of said disk drive, wherein said maximum

normal operating current does not include an amount of current drawn by said disk drive during start-up.

26. (Previously presented) The method of Claim 25, wherein said selected maximum disk drive supply current is equal to about said maximum normal operating current.

27. (Original) The method of Claim 25, wherein said maximum normal operating current draw of said disk drive comprises current provided to said spindle motor and current provided to said actuator.

28. (Previously presented) The method of Claim 25, wherein said selected maximum disk drive supply current is equal to about four times said maximum normal operating current draw of said disk drive.

29. (Previously presented) The method of Claim 25, wherein maximum disk drive supply current is equal to about five times said maximum normal operating current draw of said disk drive.

30. (Previously presented) A method for reducing the current supply requirements of a power supply interconnected to a disk drive, comprising:

providing a power supply;

providing a disk drive comprising:

5 at least a first storage disk;
 a spindle motor;
 an actuator; and
 at least a first transducer head;

 determining a maximum normal operating current draw of said disk drive,
10 wherein said maximum normal operating current does not include an amount of current
drawn by said disk drive during start-up

 selecting, by a user, a maximum disk drive supply current;

 supplying from said power supply said maximum disk drive supply current to said
disk drive during start-up of said disk drive;

15 loading said transducer head onto said storage disk,

 wherein said power supply is sized to provide said maximum normal operating
current draw of said disk drive, plus an amount of current required by at least a first
power consumer in addition to said disk drive, and wherein said power supply is not sized
to provide an amount of current equal to said maximum current draw of said disk drive
20 multiplied by a value equal to or greater than two.

31. (Original) The method of Claim 23, wherein said step of loading said
transducer head onto said storage disk is performed after said at least a first storage disk
has achieved a predetermined rotational velocity.

32. (Original) The method of Claim 23, further comprising providing a first
amount of current during start-up that is greater than a maximum normal operating

current of said disk drive in response to a user selection, wherein said maximum disk drive supply current is equal to said first amount, and wherein a start-up time of said disk drive is reduced as compared to a start-up time of said disk drive when said current is limited to said maximum normal operating current of said disk drive.

33. (Original) The method of Claim 23, wherein said step of selecting a maximum supply current comprises setting a switch.

34. (Original) The method of Claim 33, wherein said switch is at least one of a jumper and a mechanical switch.

35. (Original) The method of Claim 33, wherein said disk drive further comprises a controller, and wherein said switch comprises a software switch provided by at least one of software, firmware, or microcode running on said controller.